

Notice of Allowability

Application No.

10/625,376

Examiner

Leo Boutsikaris

Applicant(s)

VIZARD ET AL.

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 11/9/04.
2. ☒ The allowed claim(s) is/are 1-3.
3. ☒ The drawings filed on 09 November 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Allowable Subject Matter

Claims 1-3 are allowed.

Claims 1-3 are allowable over the prior art of record for at least the reason that even though the prior art discloses imaging systems comprising a high pass filter located between a lens and a dichroic filter, the latter disposed in front of the lens for filtering light incident on the lens, the prior art fails to teach or reasonably suggest an imaging system comprising a high pass filter positioned between a wide angle lens and a dichroic filter, wherein the high pass filter rejects any stray light which may have passed through the dichroic filter of a second band of frequencies incident at a wide angle to the normal of the wide angle lens, as set forth by the claimed combination.

In the imaging system of Carabba, all the light that is incident on the dichroic filter 20 and subsequently on the high pass filter 44 is collimated light (lines 34-35, col. 3). Therefore, there is no variation in the filtering capability of the dichroic filter due to variance in the angle of incidence of the incident light. Hence, the high pass filter 44 has a transmission spectrum such that it blocks any unwanted light that may have passed through the dichroic filter, not because of the different angles of incidence, but because of the less than 100% efficiency of the dichroic filter (lines 65-67, col. 3). In the claimed inventive imaging system, because the wide angle lens receives light over a large range of incidence angles, even a 100% efficient dichroic filter would not be able to block all unwanted wavelengths due to blue shift in the transmission spectrum.

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This is the reason that a specially designed high pass filter is positioned after the dichroic filter and before the lens, in order to block unwanted light incident at such wide angles that may have passed through the dichroic filter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed Dr. to Leo Boutsikaris whose telephone number is 571-272-2308.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leo Boutsikaris, Ph.D.
Primary Patent Examiner, AU 2872
November 24, 2004

